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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/536,771

12/27/2005

Peter L. Fraenkel

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INDIANAPOLIS OFFICE 27879  
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INDIANAPOLIS, IN 46204-2033

EXAMINER

LOPEZ, FRANK D

ART UNIT

PAPER NUMBER

3745

MAIL DATE

DELIVERY MODE

10/20/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/536,771	<b>Applicant(s)</b> FRAENKEL, PETER L.	
	<b>Examiner</b> F. Daniel Lopez	<b>Art Unit</b> 3745	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 15 July 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 26-38 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 26-35,38 is/are rejected.
- 7) ☐ Claim(s) 36 and 37 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Response to Amendment***

Applicant's arguments filed July 15, 2008, have been fully considered but they are not deemed to be persuasive.

Applicant's arguments with respect to claims 26 -38 have been considered but are deemed to be moot in view of the new grounds of rejection. The new grounds of rejection are necessitated by the new claims rewritten and having added limitations concerning a smooth continuous flow through at least one nozzle; that fluid is returned gravitationally by way of the return line to the pump system; and that the power producing assembly is positioned above the turbine assembly.

Applicant argues that the combination of Cros and Hopfe do not show hydraulic fluid applied to the power producing assembly as a smooth continuous flow through at least one nozzle; that fluid is returned gravitationally by way of the return line to the pump system; that the power producing assembly is above the turbine assembly; or that the motor rotates at a rotation rate higher than and independent of the rotor shaft.

The examiner disagrees. The limitations that fluid is returned gravitationally by way of the return line to the Pump system and that the power producing assembly is positioned above the turbine assembly appear to be different ways of saying the same thing, and is shown by Cros, in fig 5 and 6 (see 103 rejection below). The teaching of Hopfe, concerning a Pelton wheel, inherently includes a nozzle. The rotation rate of the generator is set by electrical demands (specifically in the US, needing a 60 cycle/second AC current) whereas the turbine rotation rate is set by parameters for the turbine and pumps. One of ordinary skill in this art would recognize that under at least some circumstances, the system would need to be set up so that the generator rotation rate is higher than the turbine rotation rate.

Applicant argues that the system of Cros requires a specialized hydraulic fluid. The examiner disagrees. Cros indicates that the fluid includes a coolant. It is well known that water has been used as a coolant, and therefore is not necessarily a specialized fluid.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 112***

Claims 28, 29, 33 and 34 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 28 line 1-2 “pumps are directly coupled to the common rotor shaft” appears to be wrong, since they are indirectly coupled to the rotor shaft by a cam (see claim 29).

In claim 33 and 34 line 3 “each pump being directly operated by the rotation of the rotor shaft” is confusing as to how “directly” is supposed to modify “operated”.

Claim 29 is indefinite, since it depends from claim 28.

***Claim Rejections - 35 USC § 103***

Claims 26-35 and 38 are rejected under 35 U.S.C. § 103 as being unpatentable over Cros in view of Hople. Cros discloses a marine turbine installation comprising a turbine assembly, having a rotor (1a, 1b) with a rotor shaft (2a, 2b), submerged in a body of water; wherein a plurality of first pumps (17, 19) are coupled to the rotor shaft, by a cam (e.g. 15); a supply line (unmarked) connected between a pressure plenum (e.g. 27), connected to the fluid outlets of the pumps, and an inlet of a hydraulic motor (e.g. 6a); wherein the motor is coupled to a drive shaft (e.g. 7a) of a power generator (e.g. 8a), forming a power producing assembly; a return line (4a) connected between fluid inlets of the pumps, and an outlet of a hydraulic motor; wherein the power producing assembly is positioned above the turbine assembly, such that the fluid in the return line is returned to the pumps gravitationally (fig 6 shows the turbine assembly at the bottom of a dam, and fig 5 shows the power producing assembly off to the side of the dam. One of ordinary skill would expect that the power producing assembly is on the bank, above the level of the water, thereby being above the turbine assembly); but does not disclose that the motor is a pelton wheel, such that the supply line delivers a

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continuous jet flow through at least one nozzle; that there is a means for making up fluid leakage, including a filter coupled to a header tank for filtering water from the body of water through an intake, with a make-up return line between an outlet of the header tank and the inlets to the plurality of pumps; that a pressure balancing tank are coupled between the first pumps and the inlet of the motor; or that a belt and pulleys connect a drive shaft of the power generator to the motor .

Hople teaches, for a marine installation comprising a hydrostatic transmission including a plurality of pumps (4) having an output fluidly coupled to a pressure plenum (manifold connecting the pumps to a second main line); a supply line connecting the pressure plenum to an inlet of a hydraulic motor (9); wherein the motor is coupled to a drive shaft of a generator (10); wherein an outlet of the motor is coupled by a return line to a return plenum (manifold connecting the first pumps to the first main line); wherein the return plenum is coupled to inlets of the first pumps; that there is a means for making up fluid leakage, including a filter (column 4 line 23-29) between an intake, from the body of water, and a header tank (6), wherein an outlet of a header tank is coupled to an inlet of the pumps, for providing replacement water to replace any leakage (column 4 line 19-29); that a pressure balancing tank (8) is coupled to the pressure plenum, for the purpose of decreasing the number and size of the pumps (column 3 line 66-68); and that the motor is a pelton wheel.

Since Cros and Hople are both from the same field of endeavor, the purpose disclosed by Hople would have been recognized in the pertinent art of Cros. It would have been obvious at the time the invention was made to one having ordinary skill in the art to include a means for making up fluid leakage, including a filter between an intake, from the body of water, and a header tank, wherein an outlet of the header tank is coupled to the inlets of the pumps of Cros, as taught by Hople, for providing replacement water to replace any leakage; and a pressure balancing tank coupled to the pressure plenum of Cros, as taught by Hople, for the purpose of decreasing the number and size of the pumps. One having ordinary skill in the art would recognize that there is a number of ways to connect the piping between the outlet of the motor, the

plenum and the header tank, including connecting a third coupling between the header tank and the plenum, thereby meeting the claimed limitations.

Since the hydraulic motors of Cros and Hople are interchangeable in the marine installation art; it would have been obvious at the time the invention was made to one having ordinary skill in the art to replace the motor of Cros with a pelton wheel, as taught by Hople, since one having ordinary skill in the art would have been able to carry out such a substitution and the results would be reasonably predictable. One of ordinary skill in the pelton wheel art would recognize that pelton wheels inherently use at least one nozzle, thereby meeting the claimed limitation concerning the nozzle.

Official notice is taken that there are a variety of different types of devices used for connecting a drive shaft of the power generator to the motor, including a belt and pulleys. Therefore, it would have been obvious at the time the invention was made to one having ordinary skill in the art to use a belt and pulleys to connect the drive shaft of the power generator to the motor of Cros, since one having ordinary skill in the art would have been able to carry out such a substitution and the resulting combination would work in a predictable manner.

### ***Conclusion***

Claims 36 and 37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is 571- 272-4821. The examiner can normally be reached on Monday-Thursday from 6:10 AM -3:40 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on 571-272-4820. The fax number for this group is 571-273-8300. Any inquiry of a general nature should be directed to the Help Desk, whose telephone number is 1-800-PTO-9199.

/F. Daniel Lopez/

F. Daniel Lopez  
Primary Examiner  
Art Unit 3745  
October 18, 2008